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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,818	02/06/2004	Teruhisa Shibahara	36856.1213	7932

54066 7590 02/06/2007
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EXAMINER

SUMMONS, BARBARA

ART UNIT	PAPER NUMBER
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2817

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/773,818	SHIBAHARA ET AL.	
	Examiner	Art Unit	
	Barbara Summons	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9 and 12 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/25/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 11/21/06 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of U.S. Patent No. 6,879,086 has been reviewed and is accepted. The terminal disclaimer has been recorded and the Double Patenting rejection has been withdrawn.

Withdrawn Claim Rejections - 35 USC §§ 102 and 103

2. The declarations under 37 CFR 1.130 and 1.132 filed 11/21/06 are sufficient to overcome the § 102 rejection based upon U.S. 6,879,086, and it has been withdrawn.
3. Applicants' submission of a certified translation of the foreign priority document has overcome all rejections based on Nakamura et al. U.S. 7,046,102, and these rejections have been withdrawn.
4. Applicants' argument that the Takeno et al./Ieki et al. rejection "at best...merely shows a schematic representation of the terminals 4-7..." (see page 7, the last para. thereof of the amend.), is considered persuasive, and the rejection has been withdrawn.

Maintained Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1-3, 6-9 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Matsuda JP 2000-138553 (of record) for reasons of record substantially repeated below for Applicants' convenience with additions for clarity and for addressing the amendment being underlined.

Regarding claims 1-3, 6 and 7, Fig. 1 of Matsuda discloses a SAW filter comprising: a piezoelectric substrate 1 that is lithium tantalate or lithium niobate (see section [0018] of the attachment 1 machine translation) each of which has the inherent material property of a relative permittivity greater than 20 (see e.g. Takeno applied below as evidence); an insulating pattern 8 disposed on the piezoelectric substrate and being silicon dioxide (see section [0021] of the translation) that has the inherent material property of a relative permittivity that is less than that of the piezoelectric substrate and that is about 4 or less; and a conductor pattern shown in Fig. 4 that has a first conductor pattern that defines input/output IDTs 2a and 2b of the IIDT filter 2 and is disposed on the piezoelectric substrate where the insulating layer is not (see Fig. 3), and a second conductor pattern that defines signal wiring traces 6 that connect to lattice filter L (Fig. 1) and the shorter ground wiring traces between them (i.e. connected to ground 4 in Fig. 1) that are in conduction with the first conductor pattern IDTs, and wherein at the portion where the wiring traces 6 and the short ground wires between them (as best seen in Fig. 4) being of different potentials and arranged in parallel and face each other in plan view, these wiring traces are all disposed on the insulating pattern 8 as can be seen in Fig. 3. Regarding claims 8 and 9, see section [0025] and section [0033] of the translation. Regarding claim 12, see section [0001] of the translation. Attachment 1

has been included with a red box drawn around the areas that the Examiner is using as locations where the parallel lines of different potentials and facing each other in plan view, overlie the insulating pattern 8.

Allowable Subject Matter

7. Claims 4, 5, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 11/21/06 have been fully considered but they are deemed not persuasive.

Applicants argue that "the element 6 of Matsuda...is disposed on and electrically connected to the wiring pattern 9...not on an insulating pattern" (see page 6, the last para. thereof of the amend.). This argument is not persuasive for several reasons. Firstly, the Examiner did not use the wiring pattern 6 on the left side of the IDTs 2a,2b, but used the pattern 6 on the right side just to be sure to have different potentials because the lines connected to 4 are ground (note that the machine translation section [0020] provided with the prior Office action is a bit muddy on which patterns, those connected to 4 or 5, are grounded). However the wiring patterns on the left and right sides of the device are similar, so either side could be used. Secondly, Applicants use Fig. 5, which is a cut through at line A-A in Fig. 1 and is directly through the via holes in the insulating layer 8 (best seen in Fig. 3), but there are other portions of wiring lines 6

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and the short lines therebetween (see the portions in the red boxes outlined in Figs. 1, 3 and 4 of Matsuda on the attachment 1 provided) that do lie on top of the insulating pattern on either side of the filter. There is nothing in the claims requiring that the entire area of the wiring lines must be on the insulating pattern, and as explicitly stated by the reference "electrode extension sections 6 and 7 of the IIDT electrode 2... are arranged on the insulating layer 8" (see the translation section [0016], the last three lines thereof). Therefore, the argument is unpersuasive and the rejection has been maintained.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Summons whose telephone number is (571) 272-1771. The examiner can normally be reached on M-Th, M-Fr.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pascal can be reached on (571) 271-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bs

February 2, 2007

(1 Attachment)



BARBARA SUMMONS
PRIMARY EXAMINER

Attachment 1

(5)

特開2000-138553

8

7

【図10】本発明の弾性表面波フィルタの特性図である。

【図11】従来の共振器型フィルタの構造を示す平面図である。

【符号の説明】

1：圧電基板

2：IIDT電極

3：格子型電極

4：入力電極

5：接地電極

6：入力側立体配線部

7：接地側立体配線部

8：絶縁層

9、10：ラティス型回路の入力電極

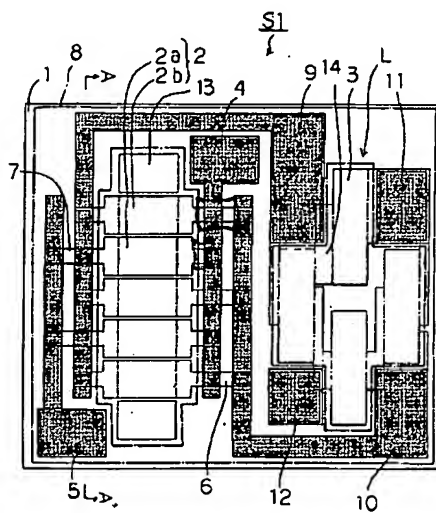
11：平衡出力対の一方の電極

12：平衡出力対の他方の電極

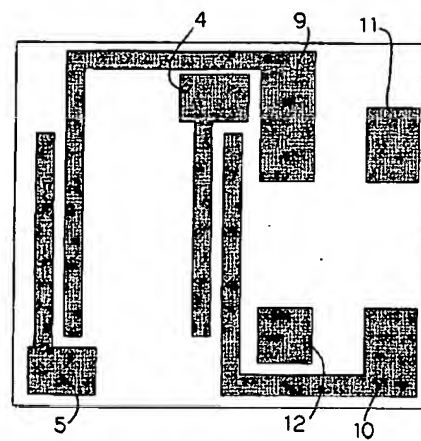
15：保護層

S1：弾性表面波フィルタ

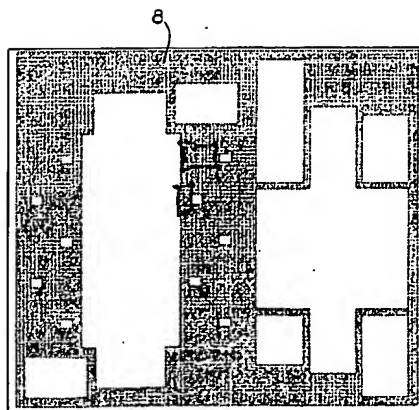
【図1】



【図2】



【図3】



【図4】

